F2R36C2IM 12MP Day & Night Fixed IR Vandal Resistant Panoramic IP Camera

www.meritlilin.com

12MP 12-megapixel

Day&Night

3D NDR Noise Reduction

IP67 weather proof — Weather Proof

IK10 Vandal Proof

SD Card Recording

- ▶ 12 megapixel CMOS image sensor
- ▶ Certified Immervision Enables (RPL code C9VVT)
- ▶ H.265/HEVC and H.264/AVC high-performance video compression
- ▶ Simultaneous streaming of H.265 and H.264 encoded streams
- ▶ Smart H.264/H.265 supported
- ▶ 3D noise reduction (MCTF)
- ▶ 2D WDR function
- ▶ Digital PTZ supported
- ▶ IVS supported
- ▶ Tampering / Motion / Network lost detection event function
- ▶ SMART event
- ▶ High efficiency IR LED, radiant distance up to 20m
- ▶ Day & Night (IR cut removable)
- ▶ Built-in highly sensitive microphone
- ▶ 2-way audio supported
- ▶ Digital I/O : 1 in, 1 out
- ▶ ONVIF Profile S and Profile T supported
- ▶ Support Client Side Dewarping
- ▶ IP67 rain and dust resistant
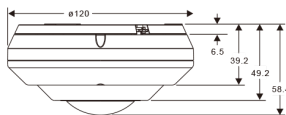
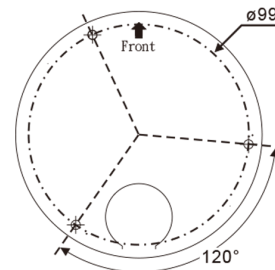**Dimensions**
Ø120 × 58.8 mm

Diagram of mounting holes:(unit in mm)

Wind and Rain Standards

Meet international IP67 standards for dust and moisture resistant allowing you to install cameras in environments subject to wind and rain

Impact Resistant

IK10-certified housing designed to protect the camera from destructive behavior

Day and Night Operations via Removal of the IR-cut filter

F2R36C2IM camera was designed using a mechanical IR cut filter for increased IR sensitivity resulting in improved night time images. The removable IR-cut filter allows day and night operations even in the low lux condition providing outstanding vision

Sense Up+

Deliver outstanding video outputs in poor light conditions without experiencing motion blur. You can see video clearly even during nighttime without sufficient lighting support
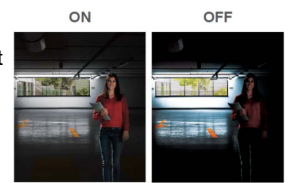
3D Noise Reduction

Remove noise from a signal. Suppressing noise in an image in low light conditions and able to retain quality videos at the same time

Wide Dynamic Range (WDR)

Wide Dynamic Range (WDR) displays details of both the brightest and darkest areas. WDR can extend image visibility under high contrast lighting scenes and improve image quality

Privacy Masking

Privacy Masking is a feature used to protect personal privacy by concealing private areas in the camera's field of view. Doorways and house windows for example are not subject to surveillance

Video Security App

Available on Android and iOS – LILINViewer app provides security alarm push notification, real-time live viewing, and remote video playback

SD Cards in Sync with NAV Software

F2R36C2IM camera with built-in Micro SD/SDHC/SDXC card slots can provide redundant video viewing and recording. You can synchronize an SD card with LILIN VMS (Video Management Software) – Navigator (NAV)

Alarm Detection

Alarm Detection is designed to provide the electronic detection of intruders

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Video Performance

Model	F2R36C2IM
Min. Illumination	Color : 0.3 Lux at F2.2 ; B/W : 0.09 Lux at F2.2

Lens / Night Vision (Infrared LED)

Focal Length	1.2mm
Iris	F2.2
Iris Control	Fixed IRIS
Angle of View	185° (H) 185° (V) 185° (D)
Peak Wavelength	850nm
Beam Spread	90°
Radiant Distance	20M

Sensor

Pick Up Element	1/1.7" CMOS image sensor
Effective Pixels	4072 (H) × 3046 (V) = 12,403,312 (Pixels)

Certifications

CE	Yes, EMI CLASS B
FCC	Yes, EMI CLASS B
IP Rating	IP67
Vandal Resistant Rating	IK10

PC Requirements

CPU	Intel® Core™ i7 or higher grade
OS	Windows 7 or above
RAM	8GB or above, Dedicated Graphics Card
Web Browser	Microsoft® Internet Explorer® 9 or above

Input / Output

Audio Input / Output	Mono, 1.98 Vp-p , 2.2KΩ , Terminal Block
Audio	Two-way Audio, G.711 u-law / PCM / AAC, SIP, Built-in Microphone
Alarm Input / Output	Digital 1 input (TTL, +3 – 5VDC) / 1 Output (MOS Relay contact N.O., Load.max. 40VDC,450mW/300mA,450mW), Terminal block

Video Streaming

Video Compression	H.265/HEVC main profile, H.264 main and high profile , Motion JPEG
Video Streaming	RTP/HTTP, RTP/TCP, RTP/UDP, Multicast 4 configurable streams in H.265 and H.264 and Motion JPEG, configurable frame rate and bandwidth
Number of Streams	4
Video Bitrate	128Kbps – 12Mbps; Frame rate and bit rate controllable on-the-fly; VBR / CBR / GOP supported, Fixed bitrate, Smart H.264/H.265

Network Security

Encryption	Base64 HTTP encryption, HTTPS encryption, DDNS via HTTPS
Authentication	Digest HTTP authentication, RTSP authentication, TLS, 802.1x, DDNS via HTTPS
Address Filter	IP address filter, MAC address filter
Access	Multiple user access levels with password protection
User accounts	10 user accounts available
Multi IP Address	Yes

Video Resolutions (H x V)

Resolution	9M (3008 x 3000), 8M (2848 x 2832), 7M(2656 x 2656), 6M(2464 x 2464), 5M(2240 x 2240), 4M(2016 x 2000), 3M(1760 x 1744), 2M(1440 x 1440), 1M(1024 x 1024), 736 x 720, 480 x 480, 352 x 240
Maximum Frame Rate	up to 25 fps @ 3008 × 3000

Mechanical

Dimension	Ø120 × 58.8 mm
Weight	585g
Casing Material	Aluminum alloy

Video Functions

Scanning System	Progressive Scan
Infrared Cut Filter	Auto / Day (Color) / Night (Mono) / Schedule
White Balance	ATW-NARROW / ATW-WIDE / AWC(MANUAL)
Back Light Compensation	Yes
Electrical Shutter	1/30(1/25)s – 1/30000s
Sense Up	Off / x2 / x4 / x8 / x16
Sense Up+	Yes
Auto Gain Control	42 dB Variable Gain
S/N Ratio	More than 50dB (AGC off)
3D Noise Reduction	Off / 1 – 32 Selectable
2D WDR	Off / Auto / x2 / x3 / x4 (by normal mode) Support Onvif
Privacy Masking	Off / On (4 zones)
Image Effects	Brightness, Contrast, Hue, Saturation, Sharpness
EV (Exposure Value)	Adjustable

Integration

Mobile Application	Integrated to LILIN mobile app (LILIN Viewer) iPhone, iPad, Android support
Video Management	ONVIF Profile S / ONVIF Profile T / IVS events, LILIN Navigator Enterprise 2.0 support, Third party VMS through LILIN HTTP API
SD Card Recording	Support Micro SD/SDHC/SDXC card for circular recording (card is not included)
SD Card Compatible List	Micron - 32GB,64GB,128GB,256GB,512GB, 1TB (SDXC, U1, C10) Transcend - 4GB SD,8GB SDHC,32GB SDHC C10,128GB SDXC C10 SanDisk - 8GB SDHC, 32GB, 64GB, 128GB SDHC C10 Kingston - 64GB SDXC C10
Maintenance	Firmware update via HTTP and IP Scan; Firmware available at website
IVS Basic 1.0	Motion Detection, Tampering Detection, Advanced Motion Detection, Traffic Light Detection, Tripwire Detection, Object Counting
Event Triggers	Motion / Tamper / Audio / Alarm / Network lost detection / SmartEvent
Event actions	FTP / SMTP / HTTP post / SD card / SAMBA / Alarm / SNMP Trap / Push Service notification
Languages	English, Traditional Chinese, Simplified Chinese, Spanish, Italian, Turkish, Russian, Korean, French, Arabic, Hungarian, Japanese

Network

Ethernet	10/100 Mbps Base-T (Tx), RJ-45
ePTZ & Digital Zoom	Yes, ROI (Region of Interest)
OSD	Position configurable text overlay for date, time, camera ID, event status and watermark with customizable user demand data
CPU, Memory	Embedded SoC ARM Cortex-A9, 816MHz, 512MB DDR3L, 256MB flash memory
OS	Embedded Linux 3.10
Network Protocols	IPv4, IPv6, TCP, UDP, HTTP, HTTPS, SMTP, SIP, MQTT, QoS, SNMP V1/V2/V3, SNMP Trap and heart beat, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, RTSP, RTCP, Telnet, ICMP, IGMP, ONVIF Profile S , ONVIF Profile T, SDDP, Bonjour , 802.1x, SSL/TLS
Max number of online users	10 simultaneous users
Video Display	LILIN Universal ActiveX , LILIN Java Applet
Watermark	BMP logo
Log	Event & operation log & IVS event log
Schedule	Support holiday list
Network Storage	NAS (Support SAMBA/CIFS)

Power and Environment

Starting Temperature	-10°C – +50°C (14°F – 122°F)
Operating Temperature	-40°C – +50°C (-40°F – 122°F)
Storage Temperature	-25°C – +60°C (-13°F – 140°F)
Humidity	0% – 90% RH
Power Supply	DC12V ±10% / PoE (IEEE 802.3af compliant)
Power Consumption	DC12V, 8.0W / PoE, 9.6W